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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,417	09/30/2003	Masahiro Yamanaka	SIC-02-009-1	8051

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DELAND LAW OFFICE
P.O. BOX 69
KLAMATH RIVER, CA 96050-0069

EXAMINER

LUONG, VINH

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/676,417

Applicant(s)

YAMANAKA, MASAHIRO

Examiner

Vinh T Luong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


Vinh T. Luong
Primary Examiner

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/13/05.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. The amendment filed on January 10, 2005 has been entered.
2. The drawings were received on January 10, 2005. These drawings are unaccepted by Examiner because the drawings do not comply with 37 CFR 1.84 or 1.152 as seen in Form PTO-948 attached.
3. The drawings filed on September 30, 2003 are objected to because the sectional views, such as, Figs. 2 and 5, do not show the hatching that indicates the materials of which the parts are made. See 37 CFR 1.84(h)(3).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. *Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended.* The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The information disclosure statement filed January 13, 2005 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently

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understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of *each* patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Applicant states “[T]he relevance of the foreign references should be readily apparent from the drawings.” The instant general statement does not discuss the relevance of *each* patent listed that is not in the English language as required under 37 CFR 1.98(a)(3). Moreover, it is unclear whether the relevance that is apparent from the drawings is presently understood by the individual designated in 37 CFR 1.56(c) with the most knowledge about the content of the submitted information in this application. Note that MPEP 609 states:

The concise explanation may indicate that a particular figure or paragraph of the patent or publication is relevant to the claimed invention. It might be a simple statement pointing to similarities between the item of information and the claimed invention. It is permissible but not necessary to discuss differences between the cited information and the claims. However, see *Semiconductor Energy Laboratory Co. v. Samsung Electronics Co.*, 204 F.3d 1368, 1376, 54 USPQ2d 1001, 1007 (Fed. Cir. 2000) (“[A]lthough MPEP Section 609A(3) allows the applicant some discretion in the manner in which it phrases its concise explanation, it nowhere authorizes the applicant to intentionally omit altogether key teachings of the reference.”).

In this case, Applicant does not point out: (a) any particular figure; (b) the similarities between the item of information and the claimed invention; and/or (c) the material teachings of the reference. Applicant is respectfully urged to follow the suggestions in MPEP 2004.

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 35, 36, and 38-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Ernest (GB 356,497 cited by Applicant on January 13, 2005).

Regarding claim 35, Ernest teaches a bicycle crank axle adapted to be rotatably supported within a bottom bracket (shown in phantom or dashed line in Fig. 1) of a bicycle frame, wherein the crank axle comprises:

an axle body 1 having first and second end portions 3 and 15 (Fig. 3); and

wherein a portion of the axle body 1 forms a projection 16 extending radially outwardly from one of the first and second end portions 3 and 15 of the axle body 1 (Fig. 1), wherein the projection 16 is dimensioned and positioned to be located externally of the bottom bracket (shown in phantom or dashed line in Fig. 1) so as to abut against a laterally outer side surface 20 of a bicycle crank arm 17 to prevent the bicycle crank arm 17 from moving axially outwardly. See page 2, line 121 through page 3, line 75.

Regarding claim 36, the projection 16 extends circumferentially along the axle body 1 as seen in Fig. 1.

Regarding claim 38, Ernest crank axle 1 further comprises a plurality of splines 15 (Fig. 3) disposed at the one of the first and second end portions of the axle body 1.

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Regarding claim 39, the plurality of splines 15 are disposed axially inwardly of the projection 16 (Fig. 1).

Regarding claim 40, the plurality of splines 15 are located in close proximity to the projection 16 (Fig. 1).

Regarding claim 41, the plurality of splines 15 are located directly adjacent to the projection 16 (Fig. 1). Note that the term “adjacent” does not require absolute contact, but requires relatively close position. *Ex parte Hadsel*, 109 USPQ 509 (Bd. Pat. App. & Inter. 1956).

Regarding claim 42, the plurality of splines 15 extend radially outwardly from an outer peripheral surface of the axle body 1 (Fig. 3).

Regarding claim 43, Ernest's crank axle 1 further comprises a plurality of splines 4 (Fig. 3) disposed at the other one of the first and second end portions of the axle body 1.

Regarding claim 44, the plurality of splines 4, 15 do not extend radially outwardly from an outer peripheral surface of the axle body 1.

Regarding claim 45, the plurality of splines 4, 15 do not extend radially outwardly from an outer peripheral surface of the axle body 1 located axially inwardly of the plurality of splines 4, 15.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 37 and 46-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ernest in view of Yamanaka'543 (USP 5,845,543 issued on December 8, 1998).

Regarding claim 37, Ernest teaches the invention substantially as claimed. However, Ernest does not teach the projection extending completely around the axle body.

Yamanaka'543 teaches the projection 55 extending completely around the axle body 5 in order to easily release the tight-fitting of the axle 5 and the crank arm. See col. 4, lines 48-62.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the projection of Ernest extending completely around the axle body in order to easily release the tight-fitting of the axle and the crank arm as taught or suggested by Yamanaka'543.

Regarding claim 46, Ernest teaches the invention substantially as claimed. However, Ernest does not teach the other one of the first and second end portions of the axle body including a threaded opening.

Yamanaka'543 teaches the other one of the first and second end portions of the axle body including the threaded opening 53 for affixing the crank arm. See col. 4, lines 16-23.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the other one of the first and second end portions of Ernest's axle body including the threaded opening for affixing the crank arm as taught or suggested by Yamanaka'543.

Regarding claims 47-49, see regarding claims 43-45 above.

Regarding claim 50, Ernest's projection 16 is disposed at the first end portion of the axle body 1, and further comprising a plurality of first splines 15 disposed at the first end portion of the axle body 1; and a plurality of second splines 4 disposed at the second end portion of the axle body 1.

Regarding claims 51-56, see regarding claims 39, 40, 44, 45, 36, and 37 above.

10. Applicant's arguments filed January 10, 2005 have been fully considered but they are not persuasive.

Applicant contends:

Claim 35 has been amended to clarify that a portion of the axle body forms the projection extending radially outwardly from one of the first and second end portions of the axle body.

Yamanaka discloses a bolt (54) with a flange (55), wherein bolt (54) is screwed into an end of an axle (5) in order to retain a crank arm (1) to axle (5). *The body of axle (5) does not form flange (55).* Thus, Yamanaka neither discloses nor suggests the presently claimed subject matter. (Emphasis added).

The Examiner agrees that Yamanaka's body of axle 5 does not form the flange as recited in amended claims. The rejection under 35 USC 102 based on Yamanaka is, therefore, withdrawn. However, Applicant's amended claims necessitated new grounds of rejection above.

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Applicant's arguments with respect to claims 35-6 have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on January 13, 2005 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Vinh T. Luong whose telephone number is 703-308-3221. The Examiner can normally be reached on Monday - Thursday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David Bucci can be reached on 703-308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Luong

March 14, 2005

A handwritten signature in black ink, appearing to read 'Vinh T. Luong', with a long horizontal flourish extending to the right.

Vinh T. Luong
Primary Examiner